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REMARKS/ARGUMENTS

Claims 1-19 are pending in this application. By this amendment, the specification has been amended to correct typographical errors and claim 3 has been amended to correct a grammatical error, as requested by the Examiner. Further, Claim 20 has been added.

Applicant submits that the objections regarding informalities have been overcome by these amendments.

The Examiner has rejected claims 1-6 and 18-19 under 35 U.S.C. 102(b) as being anticipated by Jung et al. (U.S. Patent No. 5,978,030).

The Examiner has also rejected claims 1-5, 7, 9, 11, 13-14 and 18-19 under 35 U.S.C. 102(b) as being anticipated by Jung (U.S. Patent No. 5,654,761).

Applicant submits that Jung '030 is directed to a system for encoding a video signal that relies on the use of a reconstructed reference frame to generate a predicted current frame (see Abstract). In particular, applicant submits that Jung '030 first calculates what a decoded reference frame would be ("reconstructed reference frame") and then selects a set of feature points from that reconstructed reference frame. The feature points are used to detect motion vectors corresponding to the feature points and the reconstructed reference frame and the motion vectors are used to generate a next frame ("predicted current frame") (see Abstract). In the encoding process, the predicted current frame signal is subtracted from the actual current frame signal to provide an error or difference signal between the predicted and actual current frames (see column 7, line 65 to column 8, line 1). This error signal is then encoded to be used in decoding (see column 8, line 1 to line 9) and is also fed back such that the predicted current frame is

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then manipulated using the error signal and becomes the new reconstructed reference frame for further frame encoding (see column 8, line 18 to line 29).

Jung '761 appears to be similarly directed to a system for encoding a video signal. A predicted current frame is created by estimating displacements of pixels between previous and current frames. An error signal or difference between the predicted and original current frames is calculated and used in a similar way to that described in Jung '030 (see Abstract and column 3, line 65 to column 4, line 22). Jung '761 also describes the use of a previous frame and a reconstructed frame to interpolate intermediate images (see column 6, lines 3 to 45).

Applicant submits that the error or difference signal in both Jung '030 and Jung '761 relates to differences of pixels between a predicted current frame and an actual current frame (see column 7, line 65 to column 8, line 29 of Jung '030) (i.e. differences between two different versions of the same frame) and are used to ensure accuracy of the predicted current frame in decoding. Interestingly, Jung '030 indicates (at column 14, lines 28-32) that this difference or error signal may not be necessary in decoding. In contrast, the differences of pixels in the present invention are between a first and second image (i.e. between different frames) and are used for interpolating intermediate frames as described at page 67, lines 1-20 of the present disclosure. In particular, Applicant submits that Jung does not teach or suggest that a corresponding point file includes "difference data on attribute values of the corresponding points" of the two different images, as claimed, for example, in independent claim 1.

Further, it appears that the discussion of interpolation in Jung '761 relates to interpolation using two decoded images rather than one image and an associated corresponding point file. Although Jung '030 does not seem to describe interpolation

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between frames specifically, it may at best describe a form of interpolation to generate a reconstructed known frame and the application of a difference signal related to the differences between the known frame and the reconstructed known frame to this generated frame. This is in contrast to the present application which involves generating intermediate frames that may not have been known and using a difference value of a pixel attribute between the previous and next "key" frame in the interpolation to adjust that pixel attribute for intermediate frames. In particular, Applicant submits that neither Jung '030 nor Jung '761 teach or suggest "generating an intermediate image ... by acting upon the first image and thus varying a position and a value of pixels included in the first image" as claimed in, for example, independent claim 14.

Based on the foregoing, Applicant submits that independent claims 1 and 14 are in condition for allowance. For at least similar reasons, Applicant submits that independent claims 4, 5, 7, and 15-17 are also in condition for allowance. Claims 2-3, 6, 8-13 and 18-19 depend from one of claims 1, 4, 5, 7, and 14-17 and for at least similar reasons, and also based on the additional elements included therein, are also in condition for allowance.
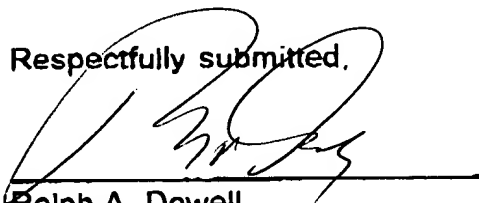
Claim 20 has been added as a dependent claim of independent claim 14 to further clarify an aspect of the invention. Applicant submits that claim 20 is in condition for allowance based on the remarks/arguments above and on the additional elements included therein.

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Conclusion:

In view of the foregoing amendments and remarks it is respectfully submitted that

this application is in condition for allowance. Favourable consideration and prompt

allowance are earnestly solicited.

Respectfully submitted,

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